The Role and Effect of Compensation Consultants on CEO Pay

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ABSTRACT

We examine the effect of compensation consultants on CEO pay using a sample of 880 firms from the S&P 1500 for fiscal year 2006. The use of compensation consultants is controversial as critics contend their true role is to aid in securing excess compensation for CEOs. We find evidence of greater compensation in the presence of a compensation consultant, consistent with this rent extraction role. However, we find no evidence of less pay-performance sensitivity when compensation consultants are hired. Among firms that retain consultants, we also examine whether there is greater rent extraction for clients of consultants with potentially greater conflicts of interest. Using a variety of specifications, we are unable to find widespread evidence of more lucrative CEO pay packages for clients of conflicted consultants despite anecdotal evidence to the contrary. Overall, we conclude from our findings that the potential conflict of interest between the firm and consultant is not a primary driver of excessive CEO pay.

1.   Introduction

This study examines whether and how compensation consultants influence the level, form and pay-performance sensitivity of CEO pay. While agency theory provides guidance on optimal contracting schemes and prior empirical literature extensively studies contracting design (see, for example, Core and Guay, 1999 and Hall and Murphy, 2002), little is known about the role of compensation consultants in the design of incentive schemes or how they influence executive pay levels. This question has become particularly important as the use of compensation consultants has risen rapidly over the past few years (Higgins, 2007). Stronger governance rules have also caused boards to rely more on the advice of independent consultants (Guerrera, 2006). We shed light on this issue by examining the relation between the use of compensation consultants and the level and design of CEO compensation for a sample of firms from the S&P 1500.

Compensation consultants provide specialized knowledge of executive compensation design on multiple dimensions. For example, they advise the firm regarding accounting and tax regulations that pertain to executive compensation design. In addition, compensation consultants often provide information on industry-wide pay practices through survey data and guide the selection of comparable (peer group) firms to aid the firm in setting competitive pay levels. More generally, with their specialized knowledge and expertise, compensation consultants have the ability to help the firm maximize shareholder value by designing compensation schemes that more closely align the interests of managers with shareholders.

Despite the potential benefits of using compensation consultants, some view their role with suspicion. Critics allege that consultants help disguise and justify excessive executive pay and argue that one of their roles is to enable executives to extract additional rents from the firm (Bebchuk and Fried, 2006; Morgenson, 2006). Beyond simply recommending higher compensation, consultants may enable rent extraction by designing compensation schemes that provide greater pay without requiring greater performance, potentially by identifying easily attainable targets and/or recommending compensation schemes that are not closely linked with

performance. According to this view, consultants help executives extract wealth from the firm at the shareholders' expense in the form of excess compensation.

The goal of this study is to provide evidence on the role of compensation consultants. To do this, we use the recent disclosure requirement of the compensation committee in the firms' proxy statement. Under the new Securities and Exchange Commission rules (effective for filings on or after December 15, 2006), companies must provide a "Compensation Disclosure and Analysis" (CD&A) report in their annual proxy statement. Among other information, firms must disclose which, if any, compensation consultant the firm retains to advise the compensation committee. From these disclosures, we hand collect this and other data for a sample of 880 firms from the S&P 1500 with December fiscal year ends. We find that 86% of the firms in our sample retain a compensation consultant, suggesting that the use of consultants is widespread.

We examine the association between the use of compensation consultants and executive compensation practices, including the level of compensation and the sensitivity of pay to performance. Descriptive analysis indicates that clients of consultants pay their CEOs higher compensation. In addition, equity compensation constitutes a greater proportion of annual pay for CEOs of firms that hire a consultant. After controlling for economic determinants of executive pay, we continue to find evidence of greater salary, bonus, equity and total annual compensation for clients of compensation consultants. However, we find no evidence of lower sensitivity of any form of compensation to return on assets for clients of consultants.[1] These findings are robust to alternative performance measures (including stock returns) and specifications, as well as to the endogenously determined choice to hire a consultant. Overall, these analyses provide some evidence that clients of compensation consultants enable rent extraction in the form of greater CEO pay, but not lower pay-performance sensitivity.

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[1] We focus on accounting returns because analysis of a sub-sample of our firms reveals that accounting performance is a determinant of the CEOs' bonuses in 98% of the observations.

Critics of compensation consultants allege that conflicts of interest cause consultants to lose their objectivity and pander to CEOs' desire for excessive compensation. To more directly examine this issue, we study, among the firms that hire consultants, whether there is greater evidence of rent extraction in firms whose consultants are more likely to have conflicts of interest. Non-independent (or conflicted) compensation consultants may be more likely to aid in executive rent extraction through higher compensation and/or lower pay-performance sensitivity. We consider three proxies for consultants with potential conflicts of interests: (1) firms that disclose that the consultant provides additional services beyond those for the compensation committee, (2) firms that hire their auditor for significant non-audit services, indicating a willingness to allow conflicts of interest, and (3) firms that are not clients of Frederic W. Cook or Pearl Meyer, consultants that focus exclusively on executive compensation services. Using these proxies, we find no consistent evidence that firms with less independent consultants compensate their executives more highly. These results are generally robust to alternative measures of performance and to a changes specification which controls for unidentified firm-specific factors. Contrary to recent reports (Higgins, 2007 and Waxman, 2007), we find no compelling evidence that conflicted consultants aid executives in extracting additional rents from the firm through higher pay or lower pay-performance sensitivity than independent consultants.

Our evidence indicates that clients of compensation consultants pay their CEOs more than firms that do not retain a consultant. However, we hesitate to conclude from this finding that consultants are associated with rent extraction because of economic differences in firms that retain consultants. Within the sample of firms retaining a consultant, we find only limited evidence of rent extraction in firms with greater conflicts of interest. Overall, we conclude that the potential conflict of interest between the firm and consultant is not a primary driver of excessive CEO pay, and that concerns about the independence of compensation consultants may be overstated.

This study contributes to the compensation and corporate governance literatures on the role of an important advisor, the compensation consultant, in achieving efficient contracting schemes.

Because of prior limited disclosure, ours is, to our knowledge, the first to study the role of compensation consultants and the effect they have on executive pay using a broad sample of firms. Our study also provides additional evidence on the more general debate regarding executive compensation practices, which remains an important issue, not least because the controversy has moved to a global forum with non-US executive pay packages coming to resemble their US counterparts (Fabrikant, 2006; Grant et al., 2006).

Our paper continues as follows. In Section 2, we provide background information and develop our hypotheses on the association between the use of compensation consultants and executive compensation. Section 3 discusses data sources and our research design. Section 4 presents the results of our empirical tests comparing firms that use a consultant to those that do not. Section 5 contains our analyses comparing CEO compensation for clients of conflicted consultants to that of independent consultants. Section 6 tests the robustness of our findings to alternative specifications and provides analyses on subsamples. We provide concluding remarks in Section 7.

2. Background and Research Questions

2.1 Background

Public companies in the U.S. frequently employ outside consultants to provide input into the executive compensation process. Compensation consultants generally assist compensation committees in two primary ways. First, they provide expertise on compensation-related issues. This expertise covers various legal and tax-related aspects of executive compensation practices, as well as pay practices appropriate for organizational changes such as mergers, acquisitions, spinoffs, and restructurings. Consultants have extensive knowledge about recent developments in pay practices and different forms of compensation and benefits. Thus, they can provide expert guidance to the compensation committee in tailoring packages for its executives (Brancato, 2002). Second, compensation consultants typically have access through proprietary surveys to more detailed information about industry pay practices than is publicly disclosed. These surveys allow

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consultants to provide compensation committees with detailed analyses of peer group compensation practices.

Until recently, there has been little public information available about the use and role of consultants.[2] This lack of transparency has contributed to suspicions about whose interest compensation consultants serve: shareholders or executives (Crystal, 1991; Morgenson, 2006). Critics contend that compensation consultants merely provide justification for overly lucrative executive pay packages. Consultants can aid the executive in extracting rents by managing survey data and opportunistically selecting peer groups that make their client's performance appear better and their pay packages appear smaller than they actually are (Crystal, 1991).[3] In addition, consultants who are also hired by management to provide other services such as actuarial and other compensation benefits may be under considerable pressure to recommend higher pay packages for executives in order to retain their other, potentially more lucrative, consulting business with the client firm (Creswell, 2007; Morgenson, 2007).

A recent report issued by the United States House of Representatives Committee on Oversight and Government Reform suggests that such conflicts may compromise pay (Waxman, 2007).   Examining pay in Fortune 250 companies in 2006 and using proprietary data obtained from six compensation consultants, the study finds that firms with the highest conflicts of interest with their consultants, as measured by the ratio of fees for other services to fees for executive pay advice, had higher median compensation than other firms. However, the study fails to control for economic determinants of pay and therefore its conclusions should be interpreted with caution.

In response to increased concerns over executive pay, the Securities and Exchange Commission now requires companies to provide a "Compensation Disclosure and Analysis" (CD&A) section in their annual proxy statement. The CD&A requires numerous disclosures by the

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[2] Prior to 2006, firms were not required to disclose the use of compensation consultants.

[3] This type of strategic selection of benchmarks has been documented in other settings. Byrd et al. (1998) and Soffer (1998) document that firms strategically select a benchmark to maximize relative performance measures in proxy statements while Schrand and Walther (2000) find that managers strategically select the prior-period earnings amount that is used as a benchmark to evaluate current-period earnings.

Compensation Committee, including which, if any, compensation consultant was used in the setting of compensation for top executives.[4] These new disclosures allow us to provide systematic evidence on the role of compensation consultants.

2.2   Research questions

One view of compensation consultants is that they contribute information and expertise to the design of compensation packages. Shareholders can benefit if using a consultant results in compensation packages for top executives that more closely link executive pay to firm performance relative to compensation schemes that committees acting on their own would have devised. If this characterization of their role is correct, then executive compensation would be more closely aligned with shareholders' interests when firms retain a compensation consultant.[5]

It is possible, however, that the role of compensation consultants is to validate excessive pay packages that are not in shareholders' interests ("rent extraction hypothesis"). A CEO that is able to exercise power over the board of directors, and the compensation committee, in particular, has the opportunity to extract additional compensation from the firm.[6] Under this view, compensation committees are either persuaded or provided incentives to recommend excessive compensation. In doing so, they may use compensation consultants to justify excessive levels of CEO pay to shareholders and outsiders. Hiring compensation consultants provides captive boards with the opportunity to attribute compensation design to the advice of experts and the pay practices of peer firms. Consistent with this argument Wade, Porac and Pollock (1997) find firms that pay

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[4] Item 407(e)(3)(iii) of Regulation S-K "requires companies to disclose the role compensation consultants played in the decision-making process, and we asked a number of companies to do so. In particular, we asked companies to more specifically disclose the nature and scope of a consultant's assignment and material instructions the company gave it" (Securities and Exchange Commission, 2006).

[5] An alternative interpretation of this view is that the compensation committee determines CEO pay schemes in a manner consistent with efficient contracting but hires a compensation consultant to signal the board's due diligence and to protect it from *ex post* criticism.

[6] Bebchuk and Fried (2006) describe the rent extraction hypothesis and its supporting arguments.

their CEOs larger base salaries are more likely to cite the use of consultants and surveys in justifying executive pay to their shareholders.

In addition to board members being under the sway of CEOs, compensation consultants are not always independent of the CEOs whose compensation they help design. These consultants may provide other, potentially more profitable, services to the client firm beyond advice on executive pay.[7] In such situations, the hiring decision for these other services is ultimately under the CEO's control. Accordingly, compensation consultants subject to such conflicts of interest will lack independence and be less likely to provide objective advice. Instead, they may curry the CEO's favor by recommending excessive pay packages in order to secure or protect these other lucrative assignments (Crystal, 1991, Morgenson, 2006). Such activities can take place even when the compensation committee is composed of independent directors. If compensation consultants help the firm provide contracts that are aligned with shareholders' interests, then they will help design pay packages that more closely approximate levels predicted by economic determinants. However, to the extent compensation consultants aid executives in extracting rents, we expect the level of pay to be higher than predicted by economic determinants.

In addition to setting the level of pay, compensation schemes align executive wealth with shareholders' wealth by linking executive pay to firm performance. In order to accomplish this, CEO compensation packages typically include variable cash pay (bonus) and equity-based pay. These types of compensation schemes increase pay-performance sensitivity by more directly linking executive wealth to firm performance. However, risk- and effort-averse executives may prefer large *fixed* compensation packages with variable pay that is less sensitive to firm performance than shareholders would prefer. Therefore, compensation consultants that help executives extract rents from the firm may recommend compensation schemes that underweight performance measures, underweight performance measures that reflect CEO effort over market-

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[7] In our sample, firms disclose a variety of other services that their compensation consultants provide, including actuarial services, pension plan design, and compensation design for mid-level managers.

wide performance, provide little downside risk by not penalizing poor performance, or simply focus on easily attainable targets. Such contracts result in weaker pay-performance sensitivity. Therefore, if rent extraction is descriptive of compensation consultants' role, we expect compensation schemes at client firms to be *less* sensitive to firm performance.

In summary, we predict that if compensation consultants aid the CEO in extracting rents, firms using their services will provide compensation schemes with greater levels of pay and variable compensation with lower pay-performance sensitivity. Similarly, we predict that CEO pay for clients of non-independent consultants will reflect greater levels of compensation and lower pay-performance sensitivity.

3.   Research Design

3.1   Sample selection and data sources

Our initial sample consists of 893 firms in the S&P 1500 on the ExecuComp database for fiscal year 2006. Because the new Compensation Disclosure and Analysis (CD&A) requirement was effective for filings on or after December 15, 2006, we limit our sample to December, 2006 fiscal year ends. We determine what, if any, compensation consultant the compensation committee retains from the CD&A disclosures in the 2006 proxy statements.   Finally, from these proxy statements, we collect the description of the services provided by the consultant, the size of the compensation committee, and the number of compensation committee meetings. We obtain financial statement data from Compustat and CEO compensation data from the ExecuComp database. Our final sample consists of 880 firms for which we could obtain the necessary data.

3.2   Consultant vs. Non-Consultant Firms

We first examine differences between firms that use a compensation consultant and firms that do not. As reported in Table 1 Panel A, our overall sample consists of large, profitable firms. Approximately 86% (759 firms) of our sample firms report using a compensation consultant in

2006. The sub-sample of firms that retain a compensation consultant is significantly larger (as measured by the book value of assets) and has lower growth opportunities (as measured by the ratio of book value to market value of equity). However, there are no significant differences in accounting (ROA) or stock market (RETURN) performance between the two groups. CEOs of firms that retain compensation consultants have shorter tenures and own a smaller proportion of the firm. In addition, clients of compensation consultants have larger compensation committees that meet more frequently than firms without consultants. Consistent with their larger size, the number of business segments is greater for firms that retain compensation consultants.

Focusing on the market share of consultants in our sample, we find that a small group of consultants dominates the market for compensation services. As reported in Table 1 Panel B, 70% (530) of the 759 firms that use a compensation consultant employ one of five large consultants: Towers Perrin (the consultant employed by the largest percent of the sample), Mercer Human Resources Consulting, Hewitt Associates, Frederic W. Cook, and Watson Wyatt. Of the remaining consultants used by our sample firms, Pearl Meyer & Partners is the largest with 41 clients (4.7%). The remaining firms employ one of several other consultants, none of which has more than 14 clients in our sample (< 2%). This distribution of market share is similar to that reported in a study of Russell 3000 firms by the Corporate Library (Higgins, 2007).

In Table 1 Panel C, we report the client industry distribution across consultants. For each industry, we provide both the number of clients in that industry (based on the Barth et al., 1998 classifications) and the industry market share. In general, there is limited evidence of significant industry concentration with a few exceptions indicated by (unreported) chi-square tests. Specifically, Towers Perrin, Mercer and Watson Wyatt have some concentration in the utilities, mining/construction and durable manufacturer industries, respectively. In addition, the other consultants are more dominant in insurance/real estate while Hewitt has no clients among our sample firms in either the insurance/real estate or mining/construction industries. To address the influence of industry, we include indicators for industry in the tests that follow.

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Table 1 Panel D provides comparisons of CEO compensation for firms that retain a consultant to firms that do not. We focus our analysis on annual compensation since firms (and indirectly compensation consultants) can only alter the flow of compensation. Therefore, we examine salary, bonus, equity grants, and total annual compensation. We find that clients of consultants compensate their CEOs with higher levels of salary, bonus, and stock option grants (as measured by the fair value). Despite larger values of stock grants for clients of consultants, the difference is not statistically different across the samples.[8] We also measure total compensation as the sum of salary, bonus, fair value of equity grants, change in pension and deferred compensation, and all other annual compensation as reported by the firm. Total compensation is larger for clients of compensation consultants, although only the medians are significantly different. One reason for this lack of significant difference is the skewed distribution of the total compensation.[9] To address this issue in the multivariate tests that follow, we measure the natural log of the compensation measures. In unreported tests, when we compare the natural log of total compensation across the groups of firms, we find a significant difference (p-value < 0.01). Overall, these differences are not surprising given the significant differences in firm size across the two groups.

In addition to examining the raw differences in CEO compensation, Panel D also examines compensation design by measuring the different forms of compensation as a proportion of total annual compensation. On average, equity pay (stock and option grants) represents the greatest component of pay for firms retaining a consultant (40% compared with 26%). This result is somewhat surprising given that firms with consultants have lower growth opportunities, on average. For firms without consultants, salary and bonus constitute 62% of annual compensation compared with only 46% for firms that retain a consultant. This finding suggests that cash compensation is a more important component of compensation for firms without a consultant. We separately investigate the various forms of compensation in the tests that follow.

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[8] Among firms that grant equity in 2006, clients of compensation consultants grant significantly more equity.
[9] For example, the three CEOs with the lowest salaries received $1, $214,000, $228,000, respectively.

3.3   Estimation

To explore the compensation design and examine the question of whether firms' use of a consultant increases CEO compensation in a manner that is consistent with rent extraction, we estimate compensation as a function of economic determinants and an indicator for whether the firm retains a compensation consultant with the following empirical model:

$$COMPENSATION_j = \beta_0 + \beta_1 CONSULT_j + \beta_2 LNASSETS_j + \beta_3 BM_j$$
$$+ \beta_4 ROA_j + \beta_5 CONSULT_j * ROA_j + \Sigma\beta_i IND_j + \varepsilon_j \qquad (1)$$

Where:

$COMPENSATION_j$	= SALARY = Log of CEO Salary (ExecuComp variable Salary) for firm j in 2006; BONUS = Log of CEO Bonus (sum of ExecuComp variable Bonus and Noneq_incent); EQUITY = Log of the fair value of CEO stock and option grants; or TOTAL = Log of CEO total annual compensation (the sum of salary, bonus, the fair value of stock and option grants, change in deferred compensation and pension value, and all other annual compensation) for firm j in 2006;
CONSULT	= 1 if firm j employs a compensation consultant in 2006, 0 otherwise;
$LNASSETS_j$	= Log of total assets (Compustat Data Item 6) of firm j in 2006;
BM_j	= Book value of common equity (Compustat Data Item 6 – Compustat Data Item 181 – Compustat Data Item 130) divided by market value of equity (Compustat Data Item 25 * Compustat Data Item 199) of firm j in 2006;
ROA_j	= Return on assets (Compustat Data Item 18 / Compustat Data Item 6) of firm j in 2006;
IND_j	= Indicator variable for 15 industries based on Barth et al., 1998.

We include the log of total assets to control for firm size effects and book-to-market ratio to control for growth opportunities (Smith and Watts, 1992; Gaver and Gaver, 1993 and 1995; Core et al., 1999). We measure firm performance using return on assets (ROA). In a random subsample of 271 firms, 98% of our firms reveal that accounting performance is a determinant of the CEOs' bonuses. Thus, we use ROA as our performance measure.[10] To reduce the influence of outliers,

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[10] This is consistent with Murphy (2000) that finds that 91% of firms in his sample use accounting earnings as a performance measures in bonus contracts.

we winsorize BM and ROA at 1% and 99%. We include industry indicator variables using the Barth et al. (1998) classification to capture differences in compensation practices across industries.

We estimate Eq. (1) for the measures of compensation described above. We use contemporaneous values of the economic determinants when estimating bonus, equity and total compensation as these forms of compensation are generally rewards for performance during the year. When estimating salary, we measure the independent variables as of the prior fiscal year-end since salaries are generally established at the beginning of the fiscal year. We control for the fact that existing equity incentives affect equity grants (Core and Guay, 1999) by including the residual from an estimation of the executive portfolio of equity incentives at the prior fiscal year-end (EQ_INCENT) when estimating equity grants and total compensation.[11]

The coefficient on CONSULT (β_1) provides evidence on whether firms that retain consultants compensate their executives more highly after controlling for economic determinants. The interaction of CONSULT and ROA tests the influence of compensation consultants on the relation between compensation and performance. If the use of a compensation consultant leads to higher CEO pay, as predicted by the rent extraction hypothesis, we expect β_1 to be positive. A negative coefficient on the interaction of consultant with ROA (β_5) is consistent with the rent extraction role of a compensation consultant leading to less pay-performance sensitivity.[12]

3.4 Selection model

One concern with the estimation above is that the choice to retain a compensation consultant may be endogenously related to the structure of the compensation. To address this

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[11] Specifically, EQ_INCENT is the deviation of the CEO's equity incentive levels from its predicted level measured as ln(actual incentive level/predicted incentive level) following the procedure in Core and Guay (1999) as for the prior fiscal year-end. The actual incentive level is measured as the natural log of the delta of the CEO's equity portfolio. The predicted level is determined from estimating a model of the level of equity incentives as a function of firm size, firm risk, growth opportunities, length of CEO employment, and free cash flow, including industry and yearly indicator variables.

[12] An alternative measure of a CEO's incentive is the sensitivity of his total equity holdings to stock price changes. We do not consider this in our analysis since firms (and indirectly, compensation consultants) can only alter the flow of equity grants, not the level of equity holdings, through compensation contracts.

concern, we estimate our analysis using two-stage least squares where the first stage models the decision to hire a consultant. [13] There is limited theory to explain why firms seek the advice of a compensation consultant. We hypothesize that firms are more likely to use a consultant when the operations of the firm are more complex, and therefore require a more sophisticated compensation scheme to align the interests of shareholders with the CEO. As a proxy for firm complexity, we use the number of reported business segments. We also hypothesize that firms are less likely to use a consultant when the CEO has greater ownership of the firm as CEO ownership reduces agency problems resulting from the separation of ownership and control. We proxy for CEO ownership using the percent of outstanding shares held by the CEO. In addition, the use of compensation consultants may be less likely when the CEO has been in office longer, as the compensation contracts have already been established and likely require less expertise to modify. Finally, we hypothesize that compensation committees are more likely to retain a consultant when the committee seeks to outsource more of the compensation contract design or devise more complex compensation schemes. We proxy for these with the number of members on the compensation committee and the number of committee meetings in the fiscal year. We also include the economic determinants described in Eq. (1) as is necessary in an instrumental variables approach.

For descriptive purposes, we report (Table 2) the results of a logit analysis of the choice to use a consultant.[14] We find that size, book to market, CEO ownership and number of meetings are significant. The remaining hypothesized determinants of a compensation consultant are not significant, possibly due to multi-collinearity. For example, the correlation between CEO ownership and CEO tenure is 0.33 *(p*-value < 0.01). The pseudo R-squared of the logit analysis is 0.185.

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[13] Note that because a firm uses (does not use) a consultant in 2006 does not mean that the firm always (never) uses a consultant so our choice model only applies to this year and not to a broader statement of whether the firm *always* (*never*) uses a compensation consultant.

[14] We do not provide the results of the first stage estimation in each of our tests for ease of exposition.

3.5   Non-Independent Consultants

Firms that retain a consultant may differ from firms that do not in ways that are correlated with compensation. As a result, using CEO compensation in non-consultant firms as a benchmark may not yield analyses with interpretable results since this approach requires appropriate modeling to control for the selection of a consultant. With limited theory guiding such a model and failure to adequately control for this selection hindering interpretations, we hesitate to rely solely on the above analyses to provide evidence on the effect of compensation consultants on CEO pay.

The criticisms of consultants generally stem from potential conflicts of interest between the firm and the consultant. When the consultant performs other, possibly more lucrative, work for the firm in addition to providing executive pay services to the compensation committee, the consultant's independence from the CEO may be impaired.[15] To examine this concern directly and avoid issues associated with selection models, we test for differences among firms that use a consultant. Specifically, we examine whether CEO pay for clients of compensation consultants that are more likely to have conflicts of interest ("conflicted") demonstrate greater evidence of rent extraction relative to clients of consultants that are less likely to suffer from conflicts of interest.

We consider three measures that capture the potential conflicts of interest between compensation consultants and firms' compensation committees. First, we determine whether the firm discloses that the consultant provides additional services, beyond consulting on executive pay, to the firm. Consultants who are also hired by management to provide other services may be under pressure to recommend higher pay packages for executives in order to retain their other, potentially more lucrative, business with the client firm. From the proxy statement CD&A, we create an

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[15] In a random subsample of 247 of our firms that retain a consultant, we find that 95% (235) indicate that the compensation committee hired the compensation consultant, even if the consultant provides other services for the firm.

indicator variable DISCLOSE that is equal to one if the firm provides a statement indicating that the consultant provides other services to the firm, zero otherwise.[16]

As a second measure of consultant independence, we consider a firm's willingness to hire its auditor for additional non-audit services. Extensive use of non-audit services may indicate that the firm will also permit conflicts to exist within the compensation consultant. We rely on non-audit services because fees for consulting services, including compensation services, are not publicly available.[17] The indicator variable NAS equals one if the firm's ratio of non-audit fees to total fees paid to its auditor is in the top third of our sample (greater than 11%).

As a third measure, we consider the specialized nature of two consultants, Frederic W. Cook and Pearl Meyer (FCPM). These two consultants specialize in executive and director compensation design and do not provide other services to their clients. As such, they are not likely to suffer from the potential conflicts of interest associated with providing additional services, under the control of the CEO, to the firm CEO (Waxman, 2007). As a result, we consider these consultants to be less likely to have conflicts of interest.

We divide the remaining, potentially non-independent, consultants into two sub-samples. Four consultants (Hewitt, Towers Perrin, Watson Wyatt, and Mercer) have a large market share in our sample and provide a wide range of human resource consulting services to their clients. According to proprietary data in Waxman (2007), the revenues obtained from these other services often dwarf the compensation consulting revenues by a factor of 10 or more.[18] As such, these top four (TOP4) consultants may be less independent than the other, smaller, consultants.

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[16] We do not classify it as a potential conflict of interest when the other services consist of advising the board on compensation issues relating to non-executive directors or for non-top five executives.

[17] We contacted the Committee on Oversight and Government Reform about obtaining their data. As of March 5, 2008, they had not responded to our request.

[18] Note that just because a firm employs a top 4 consultant does not necessarily imply that they also engage the consultant to supply other services. Waxman (2007) finds that of the 179 firms that retain a TOP4 consultant, in his sample of Fortune 250 firms, the consultant provides additional services in 113 (63%) of the firms.

We also define an indicator variable that equals one if the consultant is neither one of the four largest consulting firms nor Frederic W. Cook or Pearl Meyer, and equals zero otherwise (OTHER). These other consultants hold a smaller share of the S&P 1500 clients (no single OTHER consultant serves more that 2% of the market in our sample). If a larger client (i.e. one in the S&P 1500) represents a substantial share of the overall consulting firm's total revenue, retaining such a client may be especially important to the consultant's profits and reputation. This desire to retain the client firm may cause the consultant to be more captive to the CEO.

Table 5 provides compensation summary statistics across our various proxies for conflicted compensation consultants. Comparing across firms that do and do not disclose other services, we find no statistical difference in compensation. Turning to the non-audit service fees as a proxy for conflicted consultants, we do not find significant differences in salary or bonus. However, firms with large proportions of non-audit service fees compensate their CEO with significantly greater equity and total compensation (p-value < 0.01 in unreported tests). Finally, comparing the clients of the three types of consultants (FCPM, TOP4, and OTHER), we find that salary and bonus are not significantly different across the three groups. However clients of Frederic W. Cook or Pearl Meyer pay significantly greater levels of equity and total compensation than either clients of the top four consultants, or other consultants (p-value <0.01). At the same time, while average equity and total compensation is larger for clients of the top four consultants than clients of other consultants, these differences are not significant at conventional levels.

The research design for our multivariate tests of differences in compensation among conflicted consultants is similar to that in Section 3.3. We estimate compensation as a function of economic determinants and allow for differences in the level and pay-performance sensitivity of annual compensation for potentially conflicted consultants. Specifically, we estimate Eq. (1) on the sample of firms that retain a compensation consultant and replace the variable CONSULT with one of the indicators for whether the consultant is likely to have a potential conflict of interest. To

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the extent that CEOs of firms that hire potentially conflicted consultants are better able to extract rents, we expect these firms to exhibit higher levels of pay and lower pay-performance sensitivity.

4.   Relation between compensation consultants and pay schemes

To examine whether compensation consultants aid executives in extracting rents from the firm, we estimate compensation (SALARY, BONUS, EQUITY and TOTAL) as a function of economic determinants and the presence of a consultant as described in Eq. (1). We focus our analysis on the variables relating compensation with the presence of a consultant, while noting that the coefficients on the economic determinants are generally consistent with predictions.

We first consider whether firms that hire a consultant pay their CEOs more after controlling for the economic determinants of pay by focusing on the coefficient on CONSULT in estimating Eq. (1). As reported in Table 3, we find that CEOs of firms that retain a consultant earn greater SALARY, BONUS, EQUITY and TOTAL as evidenced by the positive and significant coefficient on CONSULT in Columns 1, 3, 5 and 7 (p-value < 0.05, p-value < 0.10, p-value < 0.01, and p-value < 0.01, respectively).

When we allow for the endogenous choice of retaining a consultant, the results generally remain. While we do not find evidence consistent with clients of consultants paying greater salaries (column 2), the relation with BONUS, EQUITY, and TOTAL remain significantly positive after allowing for the endogenously determined selection of a consultant. These statistically significant relations appear to be economically significant as well. For example, the coefficient on CONSULT when estimating total compensation in column 7 suggests that, evaluated at the sample mean, CEOs of firms that hire a compensation consultant received total compensation that was $2.7 million higher than CEOs of firms that did not retain the services of a compensation consultant. Of that amount, only $165,000 is due to salary, while $1.2 million is due to equity

compensation. Thus, the increase appears to be primarily driven by incentive compensation, and equity pay in particular.[19]

We next consider whether firms that hire a compensation consultant provide pay schemes with lower pay-performance sensitivity but find no evidence of it with respect to any form of compensation. Specifically, as reported in Table 3, the coefficient on ROA*CONSULT is not negative and significant at conventional levels in any of our tests, even after allowing for the endogenously determined selection of consultants. Together, these results suggest that clients of compensation consultants compensate their executive more highly after controlling for economic determinants, but there is no evidence that such firms have lower pay-performance sensitivity. These results provide some support for the rent extraction role of compensation consultants.

In order to examine the robustness of the results in Table 3, we consider four alternative specifications. First, we estimate Eq. (1) taking the change in the dependent and independent variables from 2005 to 2006. By examining the relation between changes in compensation and changes in determinants of compensation, this specification helps control for any unidentified firm-specific effects that remain constant over the two years. Second, we replace ROA with the annual buy-and-hold return on the firm's stock assuming dividend reinvestment (RETURN). Third, we separate ROA into an industry component based on the mean industry ROA (IND_ROA) and a firm-specific component (ADJ_ROA). We predict that, to the extent consultants are associated with CEOs rent extraction, the firm will exhibit lower pay-performance sensitivity by placing less weight on firm-specific performance which captures the CEOs effort and skill (Garvey and Milbourn, 2006). Finally, we partition ROA into positive (POS_ROA) and negative (NEG_ROA) (Gaver and Gaver, 1998). We predict that, to the extent consultants are associated with rent

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[19] The finding of greater incentive compensation may argue against rent extraction. An alternative interpretation is that the positive association between consultants and the amount of executive wealth that is sensitive to firm performance is evidence that consultants mitigate the agency problem between shareholders and managers. This interpretation is consistent with Hartzell and Starks' (2003) interpretation of a positive association between equity incentives and institutional ownership concentration as evidence that institutions serve a monitoring role in mitigating the agency problem.

extraction, lower pay-performance sensitivity results when compensation schemes penalize poor performance less as evidenced by a negative coefficient on NEG_ROA.

Results from the estimations using other performance metrics and additional specifications are reported in Table 4. The results are generally consistent with those reported in Table 3. For the analyses without taking into account the choice of using a compensation consultant, the inferences are the same when SALARY, EQUITY, and TOTAL are the dependent variables. In each of these alternative specifications, the presence of a consultant is associated with higher total pay (positive and significant coefficient on CONSULT) but no difference in pay-performance sensitivity (coefficient on CONSULT*ROA is not significant). However, when BONUS is the dependent variable, the coefficient on CONSULT is only positive and significant when RETURN is the performance metric. In addition, we find no evidence of lower pay-performance sensitivity in any alternative specification, which is consistent with the results in Table 3.

When the alternative analyses incorporate the determinants of selecting a consultant, the inferences remain the same as in Table 3 with two exceptions.[20] First, we now find evidence of greater salary when returns are the performance measure and when ROA is partitioned into industry and firm-specific ROA. Second, the evidence of greater equity for clients of consultants does not remain when we partition ROA into POS_ROA and NEG_ROA. As before, we do not find lower pay-performance sensitivity among firms that employ compensation consultants in any alternative specification. In summary, our results are, with few exceptions, robust across various alternative specifications.

Overall, the results from our analyses comparing CEO compensation for clients of compensation consultants to firms that do not employ a consultant are consistent with consultants aiding executives in extracting rents through greater compensation. However, these analyses are subject to the caveat that firms retaining consultants differ from other firms in ways that may influence compensation design. Hausman tests confirm the endogeneity of the decision to hire a

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[20] We do not examine the changes specification when we model the choice of a consultant.

consultant in our sample. Comparing compensation between firms that use and do not use consultants requires appropriate modeling for the selection of a consultant. However, consistent with a lack of theory guiding this choice, tests of our model indicate that we have not found suitable instruments for the choice of retaining a compensation consultant.[21] As a result, our ability to draw conclusions may be hindered.

5.   Relation between non-independent consultants and pay schemes

The criticisms of compensation consultants generally stem from potential conflicts of interest between the firm and the consultant when the consultant performs other work for the firm in addition to executive pay services. To address this issue and the concern that clients of consultants are different than other firms, we next focus our analysis on cross-sectional differences among clients of compensation consultants. Within this group, we analyze compensation differences between consultants that are more likely subject to conflicts of interest and those that are less likely. The results of the main analyses are presented in Table 6 and our alternative specifications in Table 7.

5.1   Disclosed conflicts of interest and CEO pay

In Table 6 Panel A, we report the results of our analyses when our proxy for potential conflicts of interest is DISCLOSE, an indicator variable that equals one when the firm discloses that its consultant performs services for the firm in addition to advising on executive pay. We find no evidence that clients of these consultants provide higher levels of pay. The coefficient on DISCLOSE is not significantly positive when any compensation measure (SALARY, BONUS, EQUITY, TOTAL) is the dependent variable. In addition, we do not find evidence of lower pay-

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[21] As suggested by Larcker and Rusticus (2007), we examine tests of overidentifying restrictions and unconstrained regressions. When SALARY and BONUS are the dependent variables, tests of overidentifying restrictions provide evidence of poor instruments. In addition, for all forms of compensation, the unconstrained regressions provide evidence of poor instruments.

performance sensitivity for these firms. The coefficient on ROA*DISCLOSE is not significantly negative regardless of which measure of compensation is the dependent variable. Together, these findings are not consistent with CEOs of firms with consultants that provide additional services extracting greater economic rents than firms that employ consultants without such conflicts.

One possible explanation for the general lack of findings is that firms are not required to disclose when consultants provide other services.[22] Therefore, the power of our tests will be reduced to the extent that some of the firms classified as DISCLOSE = 0 should in reality be classified as DISCLOSE = 1, and our results should be interpreted accordingly.

5.2   *Provision of non-audit services and CEO pay*

We present the results of our analyses where the conflict of interest is measured based on the proportion of non-audit service fees in Panel B of Table 6. Specifically, we identify firms based on the ratio of non-audit fees to total fees, where NAS is equal to one if the proportion of non-audit fees is in the top tercile, zero otherwise. We then test for differences in compensation and pay-performance sensitivity between the two groups. Examining the level of compensation, we find no evidence that clients of potentially conflicted consultants provide higher salaries, bonus, or equity compensation. In fact, in all three specifications, the coefficient on NAS is negative, although not significant at conventional levels. However, when TOTAL is the dependent variable, the coefficient on NAS is positive and significant (p-value < 0.10), indicating that firms with potentially conflicted consultants provide their CEOs with greater total compensation.[23]

The evidence regarding differences in pay-performance sensitivity provides some evidence consistent with less pay-performance sensitivity for clients of potentially conflicted consultants. The coefficients on ROA*NAS are not significantly negative when either SALARY or BONUS is

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[22] For example, using proprietary data, (Waxman, 2007) finds that a 30 (27%) of the 113 firms in his sample of Fortune 250 firms engaging compensation consultants for other services disclose in the CD&A that the consultant is "independent."

[23] Evaluating at the sample mean, the difference in total compensation for clients with high NAS is $853,000.

the dependent variable. However, the ROA*NAS coefficients are significantly negative when EQUITY (*p*-value < 0.10) and TOTAL (*p*-value < 0.05) are the dependent variables. Overall, this analysis provides limited evidence consistent with rent extraction, with the results generally indicating lower pay-performance sensitivity (without any evidence of lower pay) in determining the value of equity grants and total annual compensation at firms whose auditors provide a substantial amount of non-audit services.

5.3   Type of compensation consultant and CEO pay

Since firms are not required to disclose whether the consultant provides other services, we consider the market strategy of the consultants. Frederic W. Cook and Pearl Meyer provide only executive compensation consulting, while other consultants have the potential for greater conflicts of interest (Waxman, 2007).[24] Therefore, we test whether clients of compensation consultants other than Cook and Meyer are associated with CEO compensation rents. We allow the measure of potential conflicts of interest to differ between the four consultants with the largest market share (TOP4) and all other consultants excluding Frederic W. Cook and Pearl Meyer (OTHER).

In Table 6 Panel C, we find no evidence consistent with greater rent extraction for clients of the top four consultants. Regardless of the form of compensation, the coefficient on TOP4 is never significantly positive. In addition, the coefficient on TOP4*ROA is not significantly negative regardless of the form of compensation as the dependent variable. Overall, we interpret the evidence to be inconsistent with increased rent extraction when firms use a top four consultants.

Our analysis of the effects of the other consultants in Panel C portrays a slightly different picture. There is no evidence of rent extraction in terms of the level of SALARY, EQUITY and TOTAL; the coefficient on OTHER is not positive and significant at conventional levels in any of these specifications. In contrast, we find some evidence of greater bonuses for CEOs who are clients of OTHER consultants. The coefficient on OTHER is positive and significant (*p*-value <

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[24] We verified this claim from the marketing material of these firms' websites.

0.05), suggesting CEOs of these firms receive higher bonuses relative to the clients of Frederic W. Cook and Pearl Meyer.[25] We find no evidence of rent extraction in the form of lower pay-performance sensitivity among the clients of these consultants. The coefficient on ROA*OTHER is not significantly negative at conventional levels for any of the compensation measures.

Overall, our findings suggest that OTHER consultants may enable greater rent extraction in the form of higher bonuses (after controlling for economic determinants) but not in other forms of compensation. At the same time, we find no evidence that CEOs of firms whose compensation committees hire one of the top four consultants are able to exploit the possible conflicts of interest. These findings are important given recent allegations that such conflicts are responsible for abnormally high compensation for the clients of top four consultants (Waxman, 2007).

Collectively, the results provide no widespread evidence of rent extraction in firms whose consultants have greater potential conflicts of interest relative to more independent consultants. We find little evidence of greater compensation or lower pay-performance sensitivity for any form of compensation. In addition, we find only limited evidence of lower pay-performance sensitivity when we proxy for conflicts with non-audit services and greater bonuses among consultants that hold smaller market shares of the S&P 1500.

5.4   Alternative performance metrics and specifications

Table 7 presents estimation results of the independence proxies on pay using alternative performance metrics and specifications. We report only the coefficients on the proxy for consultant independence (β_1) and the interaction of the independence proxy with the performance metric (β_5).

First, focusing on the results for DISCLOSE, the findings are generally robust to alternative performance measures and specifications with the following few exceptions. We only find evidence of greater compensation in the changes specification when SALARY (*p*-value <

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[25] Evaluating at the sample mean, this difference corresponds to an increase in annual bonus of $1.7 million for CEOs of firms that retain one of the OTHER consultants compared to CEOs of firms that retain FCPM.

0.05) and TOTAL (p-value < 0.10) are the dependent variables. At the same time, we find evidence of lower pay-performance sensitivity in only three of the 16 specifications. The coefficient on RET*DISCLOSE is significantly negative when EQUITY (p-value < 0.10) and TOTAL (p-value < 0.05) are the dependent variable. It is also significantly negative (p-value < 0.10) when we examine the change in SALARY specification. In all other specifications, we find no evidence consistent with greater rent extraction for firms that disclose using compensation consultants who also provide other services to the firm.

Second, the results from our robustness tests on NAS are also generally consistent with the results using ROA. Only in the change in SALARY specification do we see evidence of greater pay (the coefficient on NAS is positive and significant at p-value < 0.10), suggesting that the finding of greater TOTAL in Table 6 is not robust. Also, as in Table 6, we continue to find some evidence of lower pay-performance sensitivity with regard to EQUITY and TOTAL. The coefficients on ADJ_ROA*NAS and NEG_ROA*NAS are each negative and significant at p-value < 0.10 when EQUITY is the dependent variable. Furthermore, the coefficient on NEG_ROA*NAS is significantly negative (p-value < 0.05) when TOTAL is the dependent variable. Overall, this expanded analysis continues to provide some evidence of rent extraction, with the results generally indicating lower pay-performance sensitivity (without any evidence of lower pay) in determining the value of equity grants and total annual compensation at firms whose auditors provide a substantial amount of non-audit services.

Finally, focusing on the market-strategy of the consultant, our results generally persist in each of our alternative specifications. That is, we find no evidence that clients of the TOP4 provide greater compensation in any specification. Only in the changes specification do we find limited evidence of lower pay-performance sensitivity for clients of top four consultants relative to clients of Cook or Meyer. The coefficient on ΔROA*TOP4 is negative when SALARY is the dependent variable (p-value < 0.05) and when BONUS is the dependent variable (p-value < 0.10).

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Turning to the OTHER consultants, the evidence that CEOs of these firms receive higher bonuses relative to the clients of Frederic W. Cook and Pearl Meyer holds in two of our four alternative specifications: the coefficient on OTHER is significantly positive (p-value < 0.10) when ROA is split into firm-specific and industry ROA and when it is split into positive and negative ROA. Although the tests in Table 6 reveal no evidence of lower pay-performance sensitivity, we find some evidence of this among four of our alternative specifications. However, since the negative coefficients appear in only one specification for each form of compensation, and not consistently using the same performance measure, we do not view this as providing compelling contradictory evidence.

Thus, despite subjecting our analyses to a battery of alternative tests, we are unable to provide consistent evidence of rent extraction in the presence of conflicted consultants. Overall, and contrary to recent reports (Waxman, 2007), this analysis suggests that among firms that hire consultants, there does not appear to be widespread evidence of manipulation of CEO pay when consultants have the possibility of greater conflicts of interest.

6.   Robustness and alternative specifications

In this section we test the sensitivity of our results to alternative measure of compensation incentives, additional determinants of compensation, and sub-samples of the data based on CEO and governance characteristics.

6.1   CEO tenure

New CEOs may be less entrenched than CEOs with longer tenures. As a result, existing CEOs may be more likely to extract compensation rents either by holding the board captive or maintaining an existing relationship with the compensation consultant that leads to a conflict of interest. To the extent that this is true, we would expect to find greater evidence of rent extraction for existing CEOs as opposed to CEOs in their first year of office. To address this concern, we test

the relation between compensation and consultants for a subsample of firms with CEOs that have been with the firm for at least one year. Consistent with our primary results, we continue to find (untabulated results) evidence that CEOs of firms that retain a consultant are associated with greater salaries, bonuses, equity pay and total compensation with no significance difference in pay-performance sensitivity. At the same time, we find no evidence that clients of more conflicted consultants earn greater compensation or less pay-performance sensitivity.

When the analysis focuses on only CEOs in their first year in office (229 CEOs in our sample), we find evidence that when their firms have hired a compensation consultant, these new CEOs earn greater equity pay. However, we only find weaker evidence that they earn greater salaries, bonuses, or total compensation. In addition, we find no evidence of weaker pay-performance sensitivity. In addition, as with our previous findings, we do not find evidence that CEOs of firms that retain conflicted consultants extract rents in the form of higher compensation or lower pay-performance sensitivity.

6.2   *Alternative test of pay-performance sensitivity*

Our primary analyses focus on pay-performance sensitivity as measured by the sensitivity of annual compensation to annual performance. When estimating pay-performance sensitivity of equity compensation we include deviations from predicted incentives to control for equity grants to align the portfolio of equity incentives with predicted levels (Core and Guay, 1999). However, an alternative measure of pay-performance sensitivity for equity grants is the change in the value of the grant for a 1% change in the firm's stock price (DELTA). This measure of incentives captures the sensitivity of the grant value to a change in firm value, while our measure captures the change in the size of the grant as a function of performance. To examine whether the measure of pay-performance sensitivity influences our findings, we test whether DELTA differs for firms that retain a consultant, after controlling for residual incentive portfolios, firm size, growth

opportunities, and the other determinants as in Core and Guay (1999).[26] In untabulated results, we find consistent evidence that clients of compensation consultants grant their CEO more equity incentives. At the same time, among only firms that hire compensation consultants, we do not find any evidence that clients of conflicted consultants have greater DELTA. We conclude from these results that the finding of greater equity compensation is robust to alternative measures of incentives and specifications.[27]

6.3   Board characteristics

In our hypothesis development, we provide two alternative mechanisms by which compensation consultants may aid executive rent extraction. Specifically, we conjecture that either the CEO holds the board captive, in which case the consultant serves to verify overly lucrative compensation schemes, or the CEO and the consultant collude to extract rents in spite of an independent board. While we are unable to empirically test the mechanism by which executives extract rents, to provide evidence on this issue, we test whether our findings vary with the average tenure of the board.[28] We conjecture that younger boards are less captive to the CEO.

First, we test whether the positive association between consultant and compensation persists in firms with boards of shorter average tenures. We continue to find evidence that clients of compensation consultants compensate their CEO more generously in the sample of firms in the lowest tercile of average board tenure. In addition, the tests of differences in firms that retain

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[26] Specifically, we estimate the delta of the option grant as a function of sales, book-to-market, an indicator variable for whether the firm has a net-operating loss carry forward, whether the firm has a free-cash-flow shortfall, whether the firm is dividend constrained, contemporaneous return and lagged return. See Core and Guay (1999) for a discussion of variable measurement.

[27] We also include the additional determinants of incentives (contemporaneous return and lagged return,and indicator variables for whether the firm has a net-operating loss carry forward, a free-cash-flow shortfall, and is dividend constrained,) in our original tests of equity and total compensation. Our conclusions are unchanged across all specifications.

[28] Average board tenure ranges from 1 to 27 years with the lowest (highest) tercile representing average board tenure of 5.6 (13) years. Since the passage of the Sarbanes-Oxley Act, there is little cross-sectional variation in board independence or whether the CEO is also the chairman of the board. In our sample, the CEO is never the chairman . In addition, we only find 12 firms with a compensation committee member that is not independent. Our results are qualitatively similar when we drop these firms from the analysis.

consultants predicted to be more conflicted remain insignificant in the subsample of firms with shorter board tenure. At the same time, focusing on the firms with longer average board tenures, the positive relation between consultants and compensation remains, while we find no evidence of greater rent extraction for firms that retain more conflicted consultants. We conclude from this evidence that board tenure, a proxy for stronger governance, does not influence our results.

7.   Conclusion

Little is known about the role and influence of compensation consultants on executive pay. Understanding the influence of consultants has become a particularly important question as the use of compensation consultants by boards of directors has risen over the past few years (Higgins, 2007). In addition, there is heightened interest in issues regarding the independence of corporate advisors, such as auditors and compensation consultants (e.g. Waxman, 2007). The role of compensation consultants has long been controversial as critics contend that they are often retained to help transfer wealth from shareholders by securing and justifying excessively high compensation levels and inappropriately low pay-performance sensitivity. Our analysis seeks to provide evidence on whether compensation consultants are associated with rent extraction by CEOs.

Utilizing new SEC rules requiring companies to disclose their use of a compensation consultant, we find that 86% of 880 firms with December 2006 fiscal year ends from the S&P 1500 retain a compensation consultant, suggesting that the use of consultants are widespread. We examine the relation between the presence of a compensation consultant and the level and form of CEO pay. Specifically, we consider the level of salary, bonus, equity, and total annual compensation, as well as the pay-performance sensitivity of each form of compensation.

We find evidence that clients of compensation consultants pay their CEOs more than other firms after controlling for economic determinants of pay. This finding generally holds after controlling for the endogenous choice of whether the firm retains a consultant. When we examine differences in the pay-performance sensitivity between the two groups of firms, we find no

evidence that clients of consultants have lower sensitivities than firms without compensation consultants. These results are robust across a number of alternative specifications. Our findings suggest that CEOs of firms that use compensation consultants obtain economic rents in the form of higher compensation. However, due to econometric issues associated with selection models and the lack of a clear underlying theory guiding the selection of a consultant, we hesitate to rely solely on this analysis to form any conclusions.

Critics of compensation consultants generally focus on consultants who are more likely to aid in executive rent extraction because their independence is impaired by conflicts of interest. To analyze whether consultants with greater conflicts of interest are associated with executive rent extraction, we perform cross-sectional tests among the firms that hire consultants to examine the relation between consultants hypothesized to be less independent of management and the compensation schemes. Using multiple proxies for whether the consultant is less independent, we find some, but not widespread evidence that such consultants are associated with greater rent extraction by CEOs. Overall, we do not find compelling evidence that the controversy and accusations regarding the use of potentially conflicted compensation consultants are warranted.

Our study contributes to the literature by providing evidence on the role of an important advisor, the compensation consultant, in achieving efficient contracting schemes. Because of prior limited disclosure, ours is, to our knowledge, the first to investigate the role of compensation consultants and the effect they have on CEO pay using a broad sample of firms. Understanding their role is increasingly important as use of compensation consultants becomes more widespread and potential misconceptions of their role receives significant coverage in the press.

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Table 1
Descriptive statistics for 880 firms of the S&P1500 in 2006

Panel A: Mean (median) firm characteristics partitioned by whether the firm uses a consultant

	No consultant N=121	Consultant N=759	test of differences
ASSETS	8,759.06	27,435.95	1.67**
	(1585.68)	(4399.41)	5.62***
LNASSETS	7.45	8.46	6.01***
	(7.37)	(8.39)	5.62***
BM	0.39	0.44	1.98**
	(0.34)	(0.43)	2.32**
ROA	0.06	0.05	0.73
	(0.06)	(0.05)	2.12**
RETURN	0.20	(0.28)	0.39
	(0.10)	(0.15)	1.21
CEO_OWN	4.33	1.07	7.34***
	(0.63)	(0.23)	5.03***
TENURE	7.65	5.30	3.63***
	(4.58)	(3.67)	1.63*
COMP_COM	3.71	4.04	3.02***
	(3.00)	(4.00)	3.45***
NUM_MEET	4.31	5.92	6.28***
	(4.00)	(5.00)	6.68***
NUM_SEG	2.50	2.80	1.49*
	(2.00)	(3.00)	1.92**

*, **, *** indicates a significant difference in the mean (*t*-statistic) and median (*z*-score of Wilcoxon rank-sum test) at the 10, 5, and 1 percent confidence interval respectively. ASSETS = Total assets (Compustat Data Item 6) of the firm in millions, LNASSETS = log of total assets, BM = Book value of common equity (Compustat Data Item 6 – Compustat Data Item 181 – Compustat Data Item 130) divided by market value of equity (Compustat Data Item 25 * Compustat Data Item 199) of the firm in 2006, ROA = Return on assets (Compustat Data Item 172 / Compustat Data Item 6) of the firm, RETURN = Annual buy-and-hold return on the firms stock assuming dividend reinvestment, CEO_OWN = Percent of shares outstanding held by CEO at end of 2005, TENURE = Number of years the CEO has held that position, COMP_COM = Number of members of the compensation committee in 2006, NUM_MEET = Number of meetings of compensation committee in 2006; NUM_SEG = Number of business segments of the company.

Table 1 (continued)
Descriptive statistics for 880 firms of the S&P1500 in 2006

Panel B: Number of clients and market-share by compensation consultant firm

Firm	Number	Percent
No consultant	121	13.75
Towers Perrin	154	17.50
Mercer Human Resources Consulting	122	13.86
Hewitt Associates	111	12.61
Frederic W. Cook	91	10.34
Watson Wyatt	52	5.91
Pearl Meyer & Partners	41	4.66
Other*	188	21.63
Total	880	100

*   No single consultant in this group has more than 15 clients (2%) in our sample

Table 1 (continued)
Descriptive statistics for 880 firms of the S&P1500 in 2006

Panel C: Industry distribution of clients by consultant (number of firms and percent of industry)

Industry	Towers	Mercer	Hewitt	FW Cook	Watson Wyatt	Pearl Meyer	Other Consult	No Consult	Total
Mining / Construction	4	**7**	**0**	1	1	**4**	2	3	22
	18.2%	**31.8%**	**0.0%**	4.6%	4.6%	**18.2%**	9.1%	13.6%	
Food	4	3	5	2	1	1	4	1	21
	19.1%	14.3%	23.1%	9.5%	4.8%	4.8%	19.1%	4.8%	
Textiles, Printing	9	8	7	6	2	0	12	6	50
	18.0%	16.0%	14.0%	12.0%	4.0%	0.0%	24.0%	12.0%	
Chemicals	8	4	3	4	1	1	7	1	29
	27.6%	13.8%	10.3%	13.8%	3.5%	3.4%	24.1%	3.5%	
Pharmaceuticals	4	5	4	4	4	0	5	5	31
	12.9%	16.1%	12.9%	12.9%	12.9%	0.0%	16.1%	16.1%	
Extractive Industries	11	8	9	**1**	0	2	9	6	46
	23.9%	17.4%	19.6%	**2.2%**	0.0%	4.3%	19.6%	13.0%	
Durable Mfg	31	18	25	15	**18**	**13**	32	19	171
	18.1%	10.5%	14.2%	8.8%	**10.5%**	**7.6%**	18.7%	11.1%	
Computers	2	3	3	5	1	1	14	8	37
	5.4%	8.1%	8.1%	13.5%	2.7%	2.7%	37.8%	21.6%	
Transportation	10	9	4	4	4	1	6	11	49
	20.4%	18.4%	8.2%	8.7%	8.2%	2.0%	12.2%	22.4%	
Utilities	**31**	**5**	15	7	2	3	11	**4**	78
	39.7%	**6.4%**	19.2%	9.0%	2.6%	3.9%	14.1%	**5.1%**	
Retail	**3**	9	6	5	3	3	10	9	48
	6.3%	18.8%	12.5%	10.4%	6.3%	6.3%	20.8%	18.8%	
Financial Institutions	22	23	21	20	7	5	36	25	159
	13.8%	14.5%	13.1%	12.6%	4.4%	3.1%	22.6%	15.7%	
Insurance/Real Estate	3	2	**0**	4	1	0	**17**	3	30
	10.0%	6.7%	**0.0%**	13.3%	3.3%	0.0%	**56.7%**	10.0%	
Services	12	17	9	12	7	7	23	18	105
	11.4%	16.2%	8.6%	11.4%	6.7%	6.7%	21.9%	17.1%	
Other	0	1	0	1	0	0	0	**2**	4
	0.0%	25.0%	0.0%	25.0%	0.0%	0.0%	0.0%	**50.0%**	
Total	154	122	111	91	52	41	188	121	880

Industries are based on Barth et al. (1998) classifications. Numbers and percent in bold font are significant in a partitioning of the chi-square at a 10% level.

Table 1 (continued)
Descriptive statistics for 880 firms of the S&P1500 in 2006

Panel D: Mean (median) executive compensation partitioned by whether the firm uses a consultant

	No consultant N=121	Consultant N=759	test of difference
Salary	604.05	847.97	6.12***
	(522.05)	(800.00)	7.21***
Salary_%	34%	21%	7.60***
	(29%)	(16%)	6.58***
Bonus	1051.83	1,820.41	2.99***
	(464.78)	(1,012.50)	5.38***
Bonus_%	28%	25%	1.58*
	(21%)	(23%)	0.37
Stock	872.21	5,053.37	0.56
	(0.00)	(781.88)	5.72***
Stock_%	13%	22%	4.13***
	(0%)	(19%)	4.54***
Options	627.92	1762.75	3.00***
	(0.00)	(487.50)	5.25***
Options_%	13%	18%	2.41***
	(0%)	(13%)	3.82***
Total	3,509.93	10,658.89	0.96
	(1,775.52)	(4,921.69)	8.16***

*, **, *** indicates a significant difference in the mean (*t*-statistic) and median (*z*-score of Wilcoxon rank-sum test) at the 10, 5, and 1 percent confidence interval respectively. Salary is the annual salary in thousands of dollars, Bonus is the sum of the annual bonus and non-equity incentives in thousands of dollars, Stock is the fair value of the stock granted to the CEO in the fiscal year in thousands of dollars, Options is the fair value reported by the firm of the options granted in the fiscal year in thousands of dollars, Total is the sum of salary, bonus, change in pension and deferred compensation, the fair value of the equity grants and other compensation in thousands of dollars. _% is that form compensation as a percent of Total pay.

Table 2
Logit estimation determining the firm's use a compensation consultant for 880 firms of the S&P 1500 in 2006

$$CONSULT_j = \beta_0 + \beta_1 LNASSETS_j + \beta_2 BM_j + \beta_3 ROA_j + \beta_4 CEO\_OWN_j + \beta_5 TENURE_j +$$
$$\beta_6 COMP\_COM_j + \beta_7 NUM\_MEET_j + \beta_6 NUM\_SEG_j + \Sigma \beta_i IND_j + \varepsilon_j$$

	(1)
Intercept	-2.99
	(-0.99)
LNASSET	0.418***
	(4.98)
BM	0.943**
	(1.99)
ROA	0.755
	(0.55)
CEO_OWN	-0.009***
	(-3.07)
TENURE	-0.011
	(-0.65)
COMP_COM	0.014
	(0.12)
NUM_MEET	0.258***
	(4.33)
NUM_SEG	-0.075
	(-1.10)
N	880
Pseudo-R-square	0.181
Log pseudo-liklihood	288.57

*, **, *** indicates significant coefficient at the 10, 5, and 1 percent confidence intervals. *t*-statistics are provided in parentheses. The model includes industry indicator variables based on Barth et al., 1998 classifications (not reported). EQ_INCENT is the deviation from predicted incentives in the CEOs equity portfolio. All remaining variables are as defined in Table 1.

Table 3
Evidence on the influence of compensation consultants as a regression of the level of compensation on economic determinants and an indicator for the use of a consultant for 880 firms of the S&P 1500 in 2006

	Pred.	SALARY (a)		BONUS		EQUITY		TOTAL	
		OLS	With Selection	OLS	With Selection	OLS	With Selection	OLS	With Selection
	sign	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Intercept		11.998***	11.895***	8.033***	6.468***	3.113**	-0.585	11.666***	11.135***
		(81.90)	(44.70)	(7.58)	(3.92)	(2.29)	(-0.27)	(51.10)	(30.50)
CONSULT	(+)	0.338**	0.566	0.815*	4.511**	2.247***	11.572***	0.496***	1.822***
		(1.92)	(1.12)	(1.34)	(1.91)	(2.94)	(3.72)	(2.16)	(2.86)
LNASSETS	(+)	0.162***	0.150***	0.547***	0.366**	1.212***	0.704***	0.450***	0.379***
		(6.71)	(4.19)	(5.60)	(2.54)	(9.62)	(3.38)	(16.7)	(8.69)
BM	(-)	-0.044	-0.061	-0.874	-1.310**	-1.777***	-2.972***	-0.422***	-0.589***
		(-0.64)	(-0.96)	(-1.23)	(-1.70)	(-2.07)	(-3.00)	(-3.68)	(-4.35)
ROA	(+)	-0.911	-0.821	3.577	15.070*	-11.898***	-19.628	0.221	-0.089
		(-0.86)	(-0.60)	(0.69)	(1.45)	(-2.13)	(-1.58)	(0.17)	(-0.033)
EQ_INCENT	(-)					-0.179**	-0.112	-0.016	-0.008
						(-1.80)	(-1.01)	(-0.65)	(-0.33)
ROA*CONSULT	(-)	1.236	1.206	7.534	-7.496	8.477	19.632	1.339	1.871
		(1.10)	(0.83)	(1.30)	(-0.62)	(1.36)	(1.34)	(0.95)	(0.59)
N		878	878	880	880	880	880	880	880
Adjusted R-square		0.189	0.180	0.105	0.045	0.176	0.118	0.465	0.320

(a) Because salaries are typically set before the start of the fiscal year, we use the prior year values of the control variables (LNASSETS, BM, ROA) when SALARY is the dependent variable. *, **, *** indicates significant coefficient at the 10, 5, and 1 percent confidence intervals, one-tailed in the predicted direction and two-tailed otherwise. *t*-statistics (in parentheses) are computed using Huber-White robust standard errors. The model includes industry indicator variables based on Barth et al., 1998 classifications (not reported). EQ_INCENT is the deviation from predicted incentives in the CEOs equity portfolio. The columns labeled "With Selection" are estimated using two-stage least squares, where the first stage is a selection model of consultant as in Table 2. Variables are as defined in Table 1.

Table 4
Evidence on the influence of compensation consultants using alternative performance metrics and specifications

	OLS		With Selection	
	CONSULT (+)	CONSULT*PERF (-)	CONSULT (+)	CONSULT*PERF (-)
SALARY				
Δ Comp	0.583***	-0.060		
	(3.28)	(-0.15)		
RETURN	0.286**	0.001	1.046*	0.001
	(1.82)	(0.68)	(1.39)	(0.25)
ADJ_ROA	0.375*	1.244	1.002*	0.208
	(1.62)	(1.15)	(1.37)	(0.12)
NEG_ROA	0.357*	1.470	1.400	4.147
	(1.41)	(1.30)	(1.17)	(1.18)
BONUS				
Δ Comp	-0.295	-2.856		
	(-0.65)	(-0.32)		
RETURN	0.753*	0.029***	2.601*	0.041***
	(1.47)	(5.61)	(1.40)	(4.11)
ADJ_ROA	0.718	7.988	5.469**	-1.524
	(1.02)	(1.51)	(2.27)	(-0.11)
NEG_ROA	0.679	5.426	7.554***	34.279*
	(0.80)	(0.51)	(2.70)	(1.79)
EQUITY				
Δ Comp	2.298***	3.764		
	(3.65)	(0.37)		
RETURN	2.699***	0.003	13.970***	0.002
	(3.98)	(0.38)	(5.36)	(0.087)
ADJ_ROA	2.839***	7.975	13.917***	16.337
	(3.43)	(1.49)	(4.59)	(1.50)
NEG_ROA	2.539**	12.687	-23.763	52.798
	(2.27)	(1.28)	(-0.55)	(0.17)
TOTAL				
Δ Comp	0.059***	-0.117		
	(5.37)	(-0.99)		
RETURN	0.525***	0.002**	2.263***	0.001
	(3.14)	(2.23)	(3.58)	(0.46)
ADJ_ROA	0.574**	1.864	2.110***	1.982
	(2.39)	(1.46)	(3.22)	(0.70)
NEG_ROA	0.706**	3.682*	3.166***	14.327***
	(1.77)	(1.78)	(2.70)	(3.11)

Each row represents a separate estimation. We separately report results using OLS and with the selection model. For succinctness, we only report the statistics for the coefficients on CONSULT and CONSULT*PERF. (+)/(-) indicates the predicted sign of the coefficient. We use the prior year values of the control variables and performance metrics when SALARY is the dependent variable. *, **, *** indicates significant coefficient at the 10, 5, and 1 percent confidence intervals, one-tailed in the predicted direction and two-tailed otherwise. *t*-statistics (in parentheses) are computed using Huber-White robust standard errors. Δ Comp is a specification where the model is estimated as change in compensation as a function of changes in the independent variables and CONSULT remains an indicator variable. Model estimated with alternative performance measures: RETURN is the buy and hold stock return over the fiscal year. ADJ_ROA is the industry adjusted ROA over the fiscal year, this model also includes the industry ROA and does not include industry indicators; NEG_ROA is ROA if it is less than zero, zero otherwise, this model also includes POS_ROA, which is equal to ROA if it is positive. The dependent variables SALARY, BONUS, EQUITY, and TOTAL are as defined in Table 3. The estimations also include (unreported) independent variables used in the estimations of Table 3. The columns labeled "With Selection" are estimated using two-stage least squares, where the first stage is a selection model of consultant as in Table 2.

Table 5
Mean (median) compensation for 759 firms of the S&P 1500 that use a compensation consultant partitioned by proxies for conflicted consultants

	DISCLOSE=0 N=591	DISCLOSE=1 N=168	NAS=0 N=497	NAS=1 N=262	FCPM N=132	TOP4 N=439	OTHER N=188
SALARY	834.64 (800.00)	894.69 (833.33)	841.28 (788.62)	860.56 (825.00)	873.21 (856.58)	895.92 (847.00)	718.13 (671.04)
BONUS	1,855.60 (1,000.00)	1,696.60 (1,155.63)	1,869.59 (985.00)	1,727.12 (1,055.70)	1,532.83 (754.55)	1,911.96 (1,116.42)	1,925.52 (1,314.00)
EQUITY	7,527.47 (1,887.30)	4,313.68 (2,367.53)	3,790.40*** (2,026.37)	12,555.74 (2,188.47)	21,603.59*** (2,690.37)	4,110.08 (2,324.93)	2,752.32 (1,267.95)
TOTAL	11,268.55 (4,680.57)	8,514.21 (5,234.22)	7,496.63*** (4,921.69)	16,657.55 (4,912.91)	25,418.36*** (6,117.97)	8,222.62 (5,173.00)	5,984.82 (3,517.19)

*, **, *** indicates a significant difference in the mean (*t*-statistic) at the 10, 5, and 1 percent confidence interval respectively. Wilcoxon rank-sum test *z*-scores indicate that none of the medians are significantly different at conventional levels. DISCLOSE = 1 when the firm discloses that its consultant does other work in addition to advising on executive pay, 0 otherwise. NAS = 1 when the ratio of non-audit fees to total fees paid by the firm to the auditor is in the top tercile of the sample, 0 otherwise. FCPM = 1 if the consultant is Frederic W. Cook or Pearl Meyer. TOP4 = 1 if the consultant is Hewitt, Towers Perrin, Watson Wyatt, or Mercer. OTHER = 1 if the consultant is not FCPM or TOP4. SALARY, BONUS, EQUITY, and TOTAL are as defined in Table 1.

Table 6
Evidence on the influence of conflicted compensation consultants as a regression of the level of compensation on economic determinants and an indicator for potentially conflicted consultants for 759 firms of the S&P 1500 in 2006 using a consultant

Panel A: Proxy for non-independent consultant as an indicator for whether the firm discloses the consultant provides services beyond those for the compensation committee (DISCLOSE)

	Pred. Sign	SALARY (a) (1)	BONUS (2)	EQUITY (3)	TOTAL (4)
Intercept		12.089*** (129.00)	9.359*** (9.81)	5.469*** (3.97)	11.936*** (53.60)
DISCLOSE	(+)	0.003 (0.09)	-0.511 (-0.93)	-0.830 (-1.25)	-0.090 (-1.12)
LNASSETS	(+)	0.199*** (20.60)	0.586*** (6.02)	1.262*** (9.48)	0.500*** (28.00)
BM	(-)	-0.094*** (-2.07)	-0.999* (-1.34)	-2.317*** (-2.62)	-0.426*** (-3.97)
ROA	(+)	0.417 (1.20)	10.093*** (3.61)	-5.589* (-1.89)	1.595*** (3.53)
EQ_INCENT	(-)			-0.091 (-0.93)	0.019 (1.25)
ROA*DISCLOSE	(-)	-0.447 (-0.91)	1.646 (0.28)	9.315 (1.13)	-0.089 (-0.08)
N		757	759	759	759
Adjusted R-square		0.538	0.104	0.152	0.592

Table 6 (continued)
Evidence on the influence of conflicted compensation consultants as a regression of the level of compensation on economic determinants and an indicator for potentially conflicted consultants for 759 firms of the S&P 1500 in 2006 using a consultant

Panel B: Proxy for non-independent consultant as an indicator for whether the ratio of non-audit to total service fees paid to the firm's auditor is in the top tercile (NAS)

	Pred. Sign	SALARY (a) (1)	BONUS (2)	EQUITY (3)	TOTAL (4)
Intercept		12.118*** (138.00)	9.631*** (10.00)	5.531*** (3.92)	11.883*** (53.30)
NAS	(+)	-0.054 (-1.20)	-0.679 (-1.34)	-0.724 (-1.34)	0.092* (1.32)
LNASSETS	(+)	0.199*** (21.10)	0.575*** (5.86)	1.250*** (9.60)	0.497*** (28.2)
BM	(-)	-0.079** (-1.81)	-1.006* (-1.33)	-2.526*** (-2.83)	-0.442*** (-4.20)
ROA	(+)	-0.089 (-0.40)	7.020*** (2.43)	-1.120 (-0.29)	2.206*** (4.50)
EQ_INCENT	(-)			-0.113 (-1.18)	0.017 (1.10)
ROA*NAS	(-)	1.202* (1.86)	7.617 (1.53)	-7.382* (-1.29)	-1.472** (-1.89)
N		757	759	759	759
Adjusted R-square		0.549	0.107	0.159	0.592

Table 6 (continued)
Evidence on the influence of conflicted compensation consultants as a regression of the level of compensation on economic determinants and an indicator for potentially conflicted consultants for 759 firms of the S&P 1500 in 2006 using a consultant

Panel C: Proxy for non-independent consultant as an indicator for clients of consultants that are NOT Frederic W. Cook or Pearl Meyer, partitioned into one of the four largest consultants (TOP4) or other consultants (OTHER)

	Pred. Sign	SALARY (a) (1)	BONUS (2)	EQUITY (3)	TOTAL (4)
Intercept		12.149*** (125.00)	8.651*** (8.00)	5.908*** (4.18)	11.957*** (51.90)
TOP4	(+)	-0.008 (-0.24)	0.436 (0.67)	-0.615 (-0.91)	-0.075 (-0.92)
OTHER	(+)	-0.085* (-1.74)	1.184** (1.73)	-0.470 (-0.58)	0.017 (0.18)
LNASSETS	(+)	0.195*** (20.30)	0.600*** (5.92)	1.218*** (9.14)	0.498*** (27.4)
BM	(-)	-0.095*** (-2.01)	-1.151* (-1.53)	-2.326*** (-2.54)	-0.437*** (-4.12)
ROA	(+)	-0.225 (-0.48)	10.709** (1.87)	-12.178* (-1.65)	1.648*** (2.37)
EQ_INCENT	(-)			0.774 (1.01)	0.774 (1.01)
ROA* TOP4	(-)	0.414 (0.80)	2.609 (0.39)	14.577* (1.79)	0.423 (0.47)
ROA* OTHER	(-)	0.774 (1.01)	-5.176 (-0.80)	2.602 (0.27)	-0.946 (-0.98)
N		757	759	759	759
Adjusted R-square		0.543	0.111	0.156	0.592

(a) Because salaries are typically set before the start of the fiscal year, we use the prior year values of the control variables (LNASSETS, BM, ROA) when SALARY is the dependent variable. *, **, *** indicates significant coefficient at the 10, 5, and 1 percent confidence intervals, one-tailed in the predicted direction and two-tailed otherwise. *t*-statistics (in parentheses) are computed using Huber-White robust standard errors. The model includes industry indicator variables based on Barth et al., 1998 classifications (not reported). The indicator variables capturing non-independent consultants are as follows: DISCLOSE = 1 if the firm discloses that the consultant does other work for it, 0 otherwise. NAS = 1 if the ratio of nonaudit fees to total fees paid to the auditor by the firm is in the top tercile (11%). TOP4 = 1 if the firm hired Towers Perrin, Hewitt Associates, Mercer Consulting or Watson Wyatt, 0 otherwise. OTHER = 1 if the firm hires a consultant other than Frederic W. Cook, Pearl Meyer, Towers Perrin, Hewitt Associates, Mercer Consulting or Watson Wyatt, 0 otherwise. The dependent variables SALARY, BONUS, EQUITY, and TOTAL are as defined in Table 3. All remaining variables are as defined in Table 1.

Table 7
Evidence on the influence of conflicted compensation consultants
using alternative performance metrics and specifications

Panel A: Salary and Bonus as dependent variables

	Disclose Independent		High NAS		Type of Consultant			
	DISCLOSE (+)	DISC*PERF (-)	NAS (+)	NAS*PERF (-)	TOP4 (+)	TOP4*PERF (-)	OTHER (+)	OTHER*PERF (-)
SALARY								
Δ Comp	0.071**	-0.058*	0.046*	-0.024	0.024	-0.071***	-0.181***	-0.072*
	(1.86)	(-1.38)	(1.34)	(-0.71)	(0.63)	(-2.51)	(-3.45)	(-1.62)
RETURN	-0.017	0.000	0.028	-0.000	-0.014	0.001	-0.050	0.001
	(-0.46)	(0.01)	(0.95)	(-0.39)	(-0.42)	(1.15)	(-1.16)	(0.63)
ADJ_ROA	0.029	-0.471	0.048	1.173*	0.042	0.430	-0.062	0.611
	(0.60)	(-0.93)	(0.93)	(1.76)	(0.86)	(0.80)	(-1.02)	(0.80)
NEG_ROA	-0.012	-0.667	0.001	1.965	-0.029	-0.069	-0.062	0.757
	(-0.29)	(-0.80)	(0.01)	(1.64)	(-0.61)	(-0.15)	(-1.04)	(0.70)
BONUS								
Δ Comp	-0.088	-5.374	-0.203	8.536*	0.546	-18.279*	0.199	-18.706*
	(-0.24)	(-0.97)	(-0.64)	(1.64)	(1.21)	(-1.41)	(0.39)	(-1.49)
RETURN	-0.293	-0.009	-0.747**	0.025***	0.160	0.023***	0.662	1.273
	(-0.77)	(-0.74)	(-1.87)	(3.02)	(0.33)	(3.43)	(1.24)	(1.61)
ADJ_ROA	-0.468	3.513	-0.677	9.701**	0.430	3.918	1.140*	-7.271
	(-0.74)	(0.59)	(-1.27)	(1.87)	(0.63)	(0.59)	(1.59)	(-1.13)
NEG_ROA	-0.519	1.813	-0.849*	3.834	0.902	21.059	1.112*	-3.910
	(-0.86)	(0.10)	(-1.45)	(0.30)	(1.17)	(1.09)	(1.35)	(-0.22)

Table 7 (continued)
Evidence on the influence of conflicted compensation consultants
using alternative performance metrics and specifications

Panel B: Equity and Total Compensation as dependent variables

	Disclose Independent		High NAS		Type of Consultant			
	DISCLOSE (+)	DISC*PERF (-)	NAS (+)	NAS*PERF (-)	TOP4 (+)	TOP4*PERF (-)	OTHER (+)	OTHER*PERF (-)
EQUITY								
Δ Comp	0.416	-8.375	-0.778*	5.551	0.040	4.326	-1.429***	-2.534
	(0.86)	(-1.07)	(-1.71)	(0.86)	(0.071)	(0.30)	(-2.11)	(-0.17)
RETURN	0.071	-0.029*	-1.033**	-0.003	0.166	0.001	0.079	-2.116**
	(0.13)	(-1.40)	(-2.03)	(-0.24)	(0.30)	(0.17)	(0.12)	(-1.88)
ADJ_ROA	-0.536	9.455	-0.638	-8.971*	-0.551	14.354**	-0.863	0.501
	(-0.74)	(1.10)	(-1.06)	(-1.46)	(-0.80)	(1.70)	(-1.07)	(0.06)
NEG_ROA	-0.051	47.920*	-1.014	-17.588*	-1.335	-13.969	-0.813	-13.642
	(-0.07)	(1.71)	(-1.42)	(-1.36)	(-1.60)	(-0.83)	(-0.81)	(-0.75)
TOTAL								
Δ Comp	0.130*	0.627	0.059	0.044	-0.100	0.301	-0.474***	-1.268
	(1.48)	(0.42)	(0.73)	(0.032)	(-0.93)	(0.10)	(-3.83)	(-0.41)
RETURN	-0.043	-0.004**	-0.013	0.000	-0.125*	0.003***	-0.026	-0.108
	(-0.64)	(-1.76)	(-0.21)	(0.31)	(-1.71)	(2.78)	(-0.31)	(-1.07)
ADJ_ROA	-0.073	0.607	0.090	-1.187	-0.125	0.906	-0.033	-1.503*
	(-0.73)	(0.52)	(1.00)	(-1.19)	(-1.27)	(0.94)	(-0.29)	(-1.50)
NEG_ROA	0.006	3.496	0.004	-2.446**	-0.098	-0.436	-0.028	-1.573
	(0.07)	(1.38)	(0.05)	(-1.76)	(-0.99)	(-0.22)	(-0.25)	(-0.97)

Each row represents a separate estimation. We separately report results using our three proxies for conflicted consultant, where CONSULT is either DISC, NAS, TOP4, or OTHER. For parity we only report the statistics for the coefficients on CONSULT and CONSULT*PERF. (+)/(-) indicates the predicted sign of the coefficient. We use the prior year values of the control variables and performance metrics when SALARY is the dependent variable. *, **, *** indicates significant coefficient at the 10, 5, and 1 percent confidence intervals, one-tailed in the predicted direction and two-tailed otherwise. t-statistics (in parentheses) are computed using Huber-White robust standard errors. Δ Comp is a specification where the model is estimated as change in compensation as a function of changes in the independent variables and CONSULT remains an indicator variable. Model estimated with alternative performance measures: RETURN is the buy and hold stock return over the fiscal year. ADJ_ROA is the industry adjusted ROA over the fiscal year, this model also includes the industry ROA and does not include industry indicators; NEG_ROA is ROA if it is less than zero, zero otherwise, this model also includes POS_ROA, which is equal to ROA if it is positive. The dependent variables SALARY, BONUS, EQUITY, and TOTAL are as defined in Table 3. The estimations also include (unreported) independent variables used in the estimations of Table 6.